

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**CII Carbon, L.L.C.
Gramercy Coke Plant
Gramercy, St. James Parish, Louisiana
Agency Interest Number: 32804
Activity Number: PER19960004
Draft Permit 2560-00047-V0**

I. APPLICANT:

Company:

CII Carbon, L.L.C.
2021 Lake Shore Drive, Suite 200, New Orleans, LA 70122

Facility:

1140 Jefferson Hwy
Gramercy, LA 70052
Approximate UTM coordinates are 724.600 kilometers East
and 3327.200 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

CII Carbon, L.L.C., Gramercy Coke Plant, an existing coke calcining facility began operation in September 1972. The Plant was originally owned and operated by Kaiser Aluminum and Chemical Company. Kaiser Aluminum was purchase by La Roche Chemical, Inc. in June of 1988. CII Carbon, L.L.C. purchased the coke calcining and energy recovery operations from La Roche Chemical, Inc. in December of 1988. The Gramercy Coke Plant currently operates under Permit No. 2560-00047-02, issued October 26, 1995.

CII Carbon, L.L.C., Gramercy Coke Plant, an existing coke calcining facility began operation in the 1960s. The Plant was originally owned and operated by Kaiser Aluminum and Chemical Company. CII Carbon, L.L.C. purchased the coke calcining and energy recovery operations in December of 1988. The Gramercy Coke Plant currently operates under Permit No. 2560-00047-02, issued October 26, 1995.

In the fourth quarter of 2005, CII Carbon conducted an engineering study in order to better understand and characterize the sulfur dioxide emissions from the waste heat boiler (EQT 003) and the pyroscrubber (EQT 004). The data showed sulfur dioxide emissions to be higher than what is currently permitted. Revisions were made in this permit to reflect the discrepancy.

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III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

A permit application and Emission Inventory Questionnaire were submitted by CII Carbon L.L.C. on October 3, 1996 requesting a Part 70 operating permit. A revised application and EIQ dated September 24, 2002 was received, and additional information dated January 6, 2006 was also received.

Project description

This is the initial Part 70 operating permit for the facility. Changes associated with this permit include updated emissions and the addition of existing minor sources not identified in previous permits. Also, the operating hours have been increased from 8,400 hours per year to 8,760 hour per year to provide greater operating flexibility.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	326.80	334.59	+ 7.79
SO ₂	3339.00	6,351.00	+ 3,012*
NO _x	378.00	394.02	+ 16.02
CO	< 0.01	0.02	+ 0.02
VOC	0.84	6.99	+ 6.15
SO ₃	105.00	110.00	+ 5.00

* This is not an actual increase. It is due to revised calculations based on an engineering study conducted November 2005.

Prevention of Significant Deterioration Applicability

No modifications are being made to the facility and the emission changes are due to emission updates and addition of sources not identified in previous permits; therefore, PSD does not apply and netting analysis is not required.

MACT requirements

N/A

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Air Modeling Analysis

Dispersion Models Used: ISCST3 (screen)

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
SO ₂	Annual Average	7.29 µg/m ³	(80 µg/m ³)
	24 hr Average	77.00 µg/m ³	(365 µg/m ³)
	3 hr Average	282.00 µg/m ³	(1300 µg/m ³)

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

IV. Permit Shields

N/A

V. Periodic Monitoring

N/A

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VI. Applicability and Exemptions of Selected Subject Items		
ID No:	Requirement	Notes
	The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 9, 10 and 11 of the draft permit	

VII. Streamlined Requirements			
Unit or Plant Site	Programs Being Streamlined	Stream Applicability	Overall Most Stringent Program
N/A			

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VIII. Glossary

Carbon Monoxide (CO) – A colorless, odorless gas which is an oxide of carbon.

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Sulfur Dioxide (SO₂) – An oxide of sulphur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

NESHAP - National Emission Standards for Hazardous Air Pollutants –Air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63

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VIII. Glossary (cont'd)

Continuous Emission Monitoring System (CEMS) – The total combined equipment and systems required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

NSPS - New Source Performance Standards – Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)